AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-23. (canceled)

24. (previously presented) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said non-wild type protofibril comprises the Aβ42-Arc peptide (SEQ ID NO:1).

25-26. (canceled)

27. (currently amended) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising ~~administration~~ administering to said subject a therapeutically effective amount of an antibody wherein said antibody is raised against a protofibril comprising an Aβ-Arc peptide comprising a mutation $Glu_{22} \rightarrow Gly_{22}$.

28-31. (canceled)

32. (previously presented) The method according to claim 27, wherein said antibody is monoclonal.

33. (previously presented) The method according to claim 27, wherein said antibody is human or humanized.

34-38. (canceled)

39. (previously presented) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said protofibril comprises the peptide selected from the group consisting of Aβ39-Arc (Amino Acids 1-39 of SEQ ID NO:1), Aβ40-Arc (Amino Acids 1-40 of SEQ ID NO:1), Aβ41-Arc (Amino Acids 1-41 of SEQ ID NO:1), Aβ42-Arc (SEQ ID NO:1), and combinations thereof.

40. (previously presented) The method according to claim 39, wherein said protofibril is in combination with a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

41. (previously presented) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said protofibril comprises a mutated Aβ peptide comprising the mutation $Glu_{22} \rightarrow Gly_{22}$.

42. (previously presented) The method according to claim 41, wherein said protofibril is in combination with a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

43. (previously presented) The method according to claim 27, wherein said Aβ-Arc peptide is selected from the group consisting of Aβ39-Arc (Amino Acids 1-39 of SEQ ID NO:1), Aβ40-Arc (Amino Acids 1-40 of SEQ ID NO:1), Aβ42-Arc (SEQ ID NO:1), and combinations thereof.

44. (currently amended) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising ~~administration~~ administering to said subject a therapeutically effective amount of an antibody, wherein said antibody is raised against a protofibril comprising an Aβ-Arc peptide selected from the group consisting of Aβ39-Arc (Amino Acids 1-39 of SEQ ID NO:1), Aβ40-Arc (Amino Acids 1-40 of SEQ ID NO:1), Aβ41-Arc (Amino Acids 1-41 of SEQ ID NO:1), Aβ42-Arc (SEQ ID NO:1), and combinations thereof.

45. (currently amended) The method according to claim 44, wherein said protofibril ~~is in combination with a~~ further comprises an Aβ peptide having a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

46. (cancelled)

47. (previously presented) The method according to claim 27, wherein said antibody is raised against a protofibril comprising an Aβ-Arc peptide and said Aβ-Arc peptide is selected from the group consisting of Aβ39-Arc (Amino Acids 1-39 of SEQ ID

NO:1), Aβ40-Arc (Amino Acids 1-40 of SEQ ID NO:1), and Aβ42-Arc (SEQ ID NO:1).

48. (currently amended) The method according to claim 27, wherein ~~said antibody is raised against a protofibril comprising an Aβ-Arc peptide and~~ said protofibril ~~is in combination~~ further comprises an Aβ peptide with a mutation selected from the group consisting of the Dutch, Flemish, Italian and Iowa mutations.

49. (new) The method according to claim 44, wherein said antibody is monoclonal.

50. (new) The method according to claim 44, wherein said antibody is human or humanized.

51. (new) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of an antibody, wherein said antibody is raised against a composition comprising an Aβ-Arc peptide selected from the group consisting of Aβ39-Arc (Amino Acids 1-39 of SEQ ID NO:1), Aβ40-Arc (Amino Acids 1-40 of SEQ ID NO:1), Aβ41-Arc (Amino Acids 1-41 of SEQ ID NO:1), Aβ42-Arc (SEQ ID NO:1), and combinations thereof.

52. (new) The method according to claim 44, wherein said composition further comprises an Aβ peptide having a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

53. (new) The method according to claim 27, wherein said Aβ-Arc peptide is Aβ39-Arc (Amino Acids 1-39 of SEQ ID NO:1).

54. (new) The method according to claim 27, wherein said Aβ-Arc peptide is Aβ40-Arc (Amino Acids 1-40 of SEQ ID NO:1).

55. (new) The method according to claim 27, wherein said Aβ-Arc peptide is Aβ41-Arc (Amino Acids 1-41 of SEQ ID NO:1).

56. (new) The method according to claim 27, wherein said Aβ-Arc peptide is Aβ42-Arc (SEQ ID NO:1).

57. (new) The method according to claim 44, wherein said Aβ-Arc peptide is Aβ39-Arc (Amino Acids 1-39 of SEQ ID NO:1).

58. (new) The method according to claim 44, wherein said Aβ-Arc peptide is Aβ40-Arc (Amino Acids 1-40 of SEQ ID NO:1).

59. (new) The method according to claim 44, wherein said Aβ-Arc peptide is Aβ41-Arc (Amino Acids 1-41 of SEQ ID NO:1).

60. (new) The method according to claim 44, wherein said Aβ-Arc peptide is Aβ42-Arc (SEQ ID NO:1).